

## REMARKS

### **I. Claim Amendments**

Independent claims 1, 14, and 27 have been amended to clarify the “*automatically selecting*” and “*automatically displaying*” steps. Specifically, claims 1, 14, and 27 have been amended to recite “*automatically selecting a plurality of separate portions of the electronically stored image according to a first sequence wherein the selecting step includes determining the first sequence such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image, and wherein a plurality of pixels within each separate portion of the electronically stored image are selected such that the plurality of pixels are adjacent to one another and together form a contiguous portion of the electronically stored image, and wherein each pixel in the plurality of pixels has the same at least one display parameter value*” and “*automatically displaying on a computer display device, according to a second sequence, a representation of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.*”

These amendments are fully supported by the specification, and no new matter has been added. The “*automatically selecting*” step is described at least at paragraphs [0050] and [0052]. The “*automatically displaying*” step is described at least at paragraphs [0051] and [0052].

Dependent claims 2, 6 and 8 have been amended to make them consistent with independent claim 1. Dependent claim 19 has been amended to make it consistent with independent claim 14. Dependent claim 28 has been amended to correct its dependency on independent claim 27.

## **II. Claims 1-4, 6, 13-19, and 27 are patentable over *Blank* in view of *Borovoy*.**

The Examiner has rejected claims 1-4, 6, 13-19 and 27 under 35 U.S.C. 103(a) as being unpatentable over *Blank*, U.S. 5,469,536 ("*Blank*") in view of *Borovoy et al.*, U.S. 5,537,529 ("*Borovoy*"). *December 5, 2006, Office Action*, at paragraph 8, pages 2-9. The Applicant respectfully disagrees, and traverses the rejection.

Claims 1-4, 6, 13-19 and 27, as amended, are patentable over *Blank* and *Borovoy* for at least two reasons. First, the Examiner's reasoning for combining the references is improper under the law of 35 U.S.C. § 103. Second, even if *Blank* and *Borovoy* are combined, the combined references do not disclose all the elements of claims 1-4, 6, 13-19 and 27.

### **A. The Examiner's reasoning for combining *Blank* and *Borovoy* is improper under the law of 35 U.S.C. § 103.**

In any obviousness determination, the patent examiner must determine the scope and content of the prior art, the differences between the prior art and the claims at issue, and the level of ordinary skill in the pertinent art, as established in *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). Patentability turns on whether the subject matter as a whole sought to be patented was obvious to one with "ordinary skill in the art to which the subject matter pertains" in light of the prior art. *Id.* at 3. "In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." M.P.E.P. §2141.02, citing, *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 U.S.P.Q. 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 U.S.P.Q. 698 (Fed. Cir. 1983) (emphasis in original).

Further, when making any obviousness determination, there must be a suggestion or motivation to modify a prior art reference. “Determining whether there is a suggestion or motivation to modify a prior art reference is one aspect of determining the scope and content of the prior art, a fact question subsidiary to the ultimate conclusion of obviousness.” *Ruiz v. A.B. Chance*, 57 U.S.P.Q.2d at 1167, quoting, *Sibia Neurosciences, Inc. v. Cadus Pharma. Corp.*, 225 F.3d 1349, 1356, 55 U.S.P.Q.2d 1927, 1931 (Fed. Cir. 2000). The suggestion, teaching or reason must come from the prior art itself; it cannot be based on hindsight in view of the claims. *McGinley v. Franklin Sports, Inc.*, 60 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 2001), citing, *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1769 (Fed. Cir. 1999) (“guarding against falling victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher”).

1. There is no suggestion or motivation in the prior art to combine *Blank* and *Borovoy*.

The combination of *Blank* and *Borovoy* is improper because there is no suggestion or motivation in the prior art to make such a combination. The Examiner has made the combination using impermissible hindsight, and the present invention as a whole is not obvious.

The Examiner states “*Blank* does not explicitly disclose selecting and displaying steps are automatically steps. *Borovoy* teaches recording interactions of creating a version of graphic document in a sequence and automatically playback the record so that another person may be viewed in a live environment....It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined *Borovoy*’s teaching into *Blank*’s teaching to *record interactions of painting the image*, since the combination would have ‘provided to another person as a communication that may be viewed in a live environment’ as

*Borovoy* discussed.” *December 5, 2006, Office Action*, at paragraph 8, page 4.

Contrary to the Examiner’s statement, however, none of the claims of the present application are directed to “*record interactions of painting the image.*” First, as described in paragraphs [0050] and [0051] of the specification, the displayed image is created by the software, not by the user, and therefore *there are no “interactions”* to record. “The software then accomplishes the gradual display of area 267 on the computer output device....To an observer, this process appears as though the icon is drawing the texture in area 267....This embodiment simulates a drawing process by a right-handed artist.” *Specification* at paragraph [0051]. Second, the software *does not record* “painting the image.” The software displays the image to the user, and the user may, in at least one embodiment, receive a hard copy. As described in paragraph [0046], “printer 162 can deliver a paper copy through chute 163. A copy could alternatively be engraved on hard material such as wood, metal or plastic by CNC engraver, or etched with a device such as a laser etching machine 165, and delivered through chute 166.”

Further, unlike the claimed invention, both *Blank* and *Borovoy* disclose complex user interfaces designed to capture and act upon user input.

*Blank* discloses a system in which the *user* may choose to “work with an area of the image” or “work with an object.” *Blank*, at col. 33, lines 21-28; and FIGs. 19b and 19c. The *user* may then choose to perform a specific function on the selected object or area. *Blank*, at FIGs. 19b and 19c. *Blank* also discloses a user interface made up of “menus, sub-menus, dialog boxes, and so forth in the Windows environment that are controlled by the keyboard...and pointing device....” *Blank*, at col. 31, lines 28-31; and FIG. 18. “By choosing a particular item

in a dialog box, for example, the *user* controls a type, shape, or size of a manipulation tool that is visible on the video monitor. By another choice, the *user* can execute a particular command, operation or process. Thus, by using the Windows user interface to interact with the system, the *user* can manipulate or edit an image.” *Blank*, at col. 31, lines 32-37.

Similarly, *Borovoy* discloses “a set of technologies, interfaces and methods which are able to trap the *user*’s interactions with a computer model while they are occurring” such that “each change or modification made by the *user* is recorded.” *Borovoy*, at col. 6, lines 19-25. These pre-recorded *user* interactions become a temporal sequence that may be played back. *Borovoy*, at col. 6, lines 49-61. The *user* may trigger the playback manually, or the *user* may program the playback to occur at a particular time, using standard operating system features. *Borovoy*, at col. 13, lines 49-60; and col. 14, lines 10-14. In either case, the playback is fundamentally nothing more than what was originally captured – the *user*’s interactions with an application. *Borovoy* also includes a user interface, *Borovoy*, at col. 14, line 59 – col. 16, line 44; and FIGs. 7, 8A, 8B, and 8C. Different areas of the user interface permit the *user*: (1) “to access...different communications, such as videos and notes,” *Borovoy*, at col. 15, lines 16-17; (2) “interact[] with the application,” *Borovoy*, at col. 15, lines 31-32; (3) “determine[] which versions(s) are to be included in the temporal sequence,” *Borovoy*, at col. 16, lines 8-9; and (4) utilize[] [the] drag box to insert the version into a temporal sequence,” *Borovoy*, at col. 16, lines 10-11.

In summary then, there is no suggestion or motivation in the prior art to combine *Blank* and *Borovoy*, and the invention as a whole is not obvious.

2. Modifying either *Blank* and *Borovoy* would render them unsatisfactory for their intended purposes.

No suggestion or motivation for modifying a reference exists if such a modification would render the invention of the reference unsatisfactory for its intended purposes. *See In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

Modifying *Blank* by removing the user from the process, such that an area or an object is *automatically selected* for manipulation would destroy the intent, purpose and function of *Blank*, which is specifically intended to give the user the ability to edit digital images.

Similarly, removing the user from the process disclosed in *Borovoy*, such that a version is automatically included in the temporal sequence, would destroy the intent, purpose and function of *Borovoy*, which is to allow the *user* to create a temporal sequence.

3. The combination of *Blank* and *Borovoy* does not result in the claimed invention.

Even if the combination of *Blank* and *Borovoy* were proper, the combination would disclose a system where the *user's* interactions with the user interface of the image editing system of *Blank* were trapped and recorded for future playback by the system of *Borovoy*.

For example, applying the disclosure in *Blank*, a user at the Windows user interface, *Blank*, at col. 31, lines 28-38; and Fig. 18, could select an area in an image by using the "Freehand Drag" option, *Blank*, at col. 33, line 50-col. 34, line 33; and FIG. 19b. The user could then "perform a mask procedure" to manipulate color in images. *Blank*, at col. 33, lines 29-37; col. 36, line 39-col. 41, line 6; and FIG. 19b. If these user actions, as disclosed in *Blank*, were combined with the disclosure in *Borovoy*, the user would perform these interactions in a specific area of the user interface, *Borovoy*, at col. 15, lines 31-32; and FIG. 7, ref. 701, and "[a]s the user

interacts with the application,” the interactions would be trapped and recorded as versions, *Borovoy*, at col. 15, lines 31-32. At a later time, the user could review the trapped and recorded versions and determine “which version(s) are to be included in the temporal sequence,” *Borovoy*, at col. 16, lines 8-11. This temporal sequence could then be played back. *Borovoy*, at col. 13, line 47- col. 14, line 58; and FIG. 6.

As a result, then, of combining *Blank* and *Borovoy*, a user could use the *Borovoy* system to create a temporal sequence to teach or show a future viewer how to manually edit an image using the *Blank* system. This is clearly not the Applicant’s claimed invention. As previously stated, the Applicant’s invention is not directed to recording user interactions, nor to playing back user interactions.

4. Conclusion - The Examiner’s reasoning for combining *Blank* and *Borovoy* is improper under the law of 35 U.S.C. § 103.

The Examiner’s combination of *Blank* and *Borovoy*, then, is made without any suggestion in the art to make such combination. In fact, the only suggestion for “*automatically selecting a plurality of separate portions of the electronically stored image according to a first sequence wherein the selecting step includes determining the first sequence such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image, and wherein a plurality of pixels within each separate portion of the electronically stored image are selected such that the plurality of pixels are adjacent to one another and together form a contiguous portion of the electronically stored image, and wherein each pixel in the plurality of pixels has the same at least one display parameter value*” and “*automatically displaying on a computer display device, according to a*

*second sequence, a representation of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image,”* comes from Applicant’s Patent Application. Thus, without the impermissible reference to Applicant’s disclosure, there is no motivation to combine *Blank* with *Borovoy*, and the invention as a whole is not obvious.

**B. The combination of *Blank* and *Borovoy* does not disclose all the elements of independent claims 1, 14, and 27.**

“To establish *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” M.P.E.P. § 2143.03, *citing, In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *Id.*, *citing, In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (CCPA 1970).

The combination of *Blank* and *Borovoy* does not disclose at least two elements of independent claims 1, 14 and 27, either directly or inherently. First, neither reference, alone or in combination, discloses “*automatically selecting a plurality of separate portions of the electronically stored image according to a first sequence wherein the selecting step includes determining the first sequence such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image, and wherein a plurality of pixels within each separate portion of the electronically stored image are selected such that the plurality of pixels are adjacent to one another and together form a contiguous portion of the electronically stored image, and wherein each pixel in the plurality of pixels has the same at least one display parameter value.*” Second, neither



reference, alone or in combination, discloses “*automatically displaying on a computer display device, according to a second sequence, a representation of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.*”

1. *Blank does not disclose “automatically selecting” or “automatically displaying.”*

As the Examiner has stated, “*Blank does not explicitly disclose selecting and displaying steps are automatically steps.*” *December 5, 2006 Office Action*, at paragraph 8, page 4.

2. *Borovoy does not disclose “automatically selecting.”*

*Borovoy* does not disclose “*automatically selecting.*” The user in *Borovoy* controls the sequence of interactions, making the “selecting” step a *manual* step. “In other words, while a user is interacting with a computer model (e.g., making modification to the model), *each change or modification made by the user is recorded.* For example, if the user is using a graphing program in which he changes the data set used for a particular graph, then the user’s interactions with that graphing program are recorded.” *Borovoy*, at col. 6, lines 22-28.

3. *Neither Blank nor Borovoy disclose “automatically selecting a plurality of separate portions of the electronically stored image according to a first sequence wherein the selecting step includes determining the first sequence such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image...”*

*Blank* does not disclose at least that portion of the “*automatically selecting*” step “*wherein the selecting step includes determining the first sequence such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image....*”

In *Blank*, once a file of an existing image is opened, *Blank*, at FIG. 19a, ref. 1022, the

user may select multiple objects and/or areas for editing. “[I]f the user desires to perform additional area or object manipulations...the computer loops back through .. to repeat the steps 1026 through 1066.” *Blank*, at col. 35, lines 47-53; and FIGs. 19b and 19c. There is nothing in the *Blank* disclosure, or the diagrams of FIGs. 19 and 19b, that would prevent or deter a user from selecting a second area or a second object that is contiguous with the preceding selected area or object.

In response to this argument, the Examiner previously stated, “However, such prevent or deter a user from selecting a second area or a second object that is contiguous with the preceding selected area or object is not claimed.” *December 5, 2006 Office Action* at paragraph 20, page 30.

The Applicant respectfully disagrees. While it is true that the Applicant is *not* claiming to prevent a *user* from selecting a second area that is contiguous with the preceding selected area, the Applicant is explicitly claiming an *automatic* selecting step that prevents the *software* from selecting at least one second area that is contiguous with the preceding selected area, as clearly stated in claims 1, 14, 27: “wherein the selecting step includes determining the first sequence such that at least one selected portion of the electronically stored image is *not contiguous* with an immediately preceding selected portion of the electronically stored image.”

As for the second reference, *Borovoy* is not directed to a system for editing digital images, and therefore does not contemplate the concept of “contiguous” portions of stored images.

4. Neither *Blank* nor *Borovoy* disclose “automatically displaying on a computer display device, according to a second sequence, a representation of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.”

Independent claims 1, 14, and 27 all recite a *first sequence*, “determining the *first sequence* such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image, and wherein a plurality of pixels within each separate portion of the electronically stored image are selected such that the plurality of pixels are adjacent to one another and together form a contiguous portion of the electronically stored image, and wherein each pixel in the plurality of pixels has the same at least one display parameter value.” Independent claims 1, 14, and 27 also all recite a *second sequence*, “automatically displaying on a computer display device, according to a *second sequence*.” The first sequence is used by the automatic *selecting* step, while the second sequence is used by the automatic *displaying* step. The first sequence is different from the second sequence, as described in the Specification at least at paragraphs [0050] and [0051].

*Blank* discloses only one sequence, the sequence defined by the user. As the Examiner states, the “user is able to sequentially select each portion of a plurality of portions of the image to apply texture on portions of the image....” *December 5, 2006, Office Action*, at paragraph 8, page 3. The *Blank* system displays the user-selected portions in this exact same sequence. As the Examiner states, “sequentially displaying on the monitor the applied texture.” *December 5, 2006, Office Action*, at paragraph 8, page 4.

Similarly, *Borovoy* discloses only one sequence, the sequence defined by the user. The user’s interactions are recorded, and those same interactions are played back. As the Examiner

states, “*Borovoy* teaches recording interactions of creating a version of graphic document in a sequence and automatically playback the record so that another person may be viewed in a live environment.” *December 5, 2006, Office Action*, at paragraph 8, page 4.

In summary, then, both *Blank* and *Borovoy* disclose only one sequence, the sequence determined by the user. Neither reference, alone or in combination, discloses automatically displaying on a computer display device, according to a *second sequence*, a representation of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.”

5. Conclusion - Even if combined, *Blank* and *Borovoy* do not disclose all the elements of independent claims 1, 14, and 27.

In conclusion, neither reference alone or in combination, discloses at least two elements of the claimed invention, either directly or inherently. First, neither *Blank* or *Borovoy*, alone or in combination, discloses “*automatically selecting a plurality of separate portions of the electronically stored image according to a first sequence wherein the selecting step includes determining the first sequence such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image, and wherein a plurality of pixels within each separate portion of the electronically stored image are selected such that the plurality of pixels are adjacent to one another and together form a contiguous portion of the electronically stored image, and wherein each pixel in the plurality of pixels has the same at least one display parameter value.*” Second, neither *Blank* nor *Borovoy*, alone or in combination, discloses “*automatically displaying on a computer display device, according to a second sequence, a representation of each selected portion of the*

*electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.”*

**C. Dependent claims 2-4, 6, 13, and 15-19 are patentable over *Blank* in view of *Borovoy*.**

Dependent claims 2-4, 6, 13, and 15-19, then, must also be patentable, since “[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” M.P.E.P. § 2143.03, *citing, In re Fine*, 837 F.3d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

**D. Conclusion: Claims 1-4, 6, 13-19, and 27 are patentable over *Blank* in view of *Borovoy*.**

Claims 1-4, 6, 13-19 and 27, as amended, are patentable over *Blank* and *Borovoy* for at least two reasons. First, the Examiner’s reasoning for combining the references is improper under the law of 35 U.S.C. § 103. Second, even if *Blank* and *Borovoy* are combined, the combined references do not disclose all the elements of claims 1-4, 6, 13-19 and 27.

**III. Claims 1, 7, 14, and 20 are patentable over *Cohen* in view of *Blank*.**

The Examiner has rejected claims 1, 7, 14 and 20 under 35 U.S.C. 103(a) as being unpatentable over Cohen, U.S. 5,647,796 (“*Cohen*”) in view of Blank, U.S. 5,469,536 (“*Blank*”). *December 5, 2006, Office Action*, at paragraph 13, pages 16-19. The Applicant respectfully disagrees and traverses the rejection.

Claims 1, 7, 14, and 20, as amended are patentable over *Cohen* and *Blank* because the combination of Cohen and Blank does not disclose all the elements of claims 1, 7, 14, and 20.

**A. The combination of *Cohen* and *Blank* does not disclose all the elements of independent claims 1 and 14.**

As stated above, to establish obviousness “all the claim limitations must be taught or

suggested by the prior art. ” M.P.E.P. § 2143.03. The combination of *Cohen* and *Blank* does not disclose at least one element of independent claims 1 and 14, either directly or inherently.

Neither reference, alone or in combination, discloses “*automatically displaying on a computer display device, according to a second sequence, a representation of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.*”

Independent claims 1 and 14 both recite a *first sequence*, “determining the *first sequence* such that at least one selected portion of the electronically stored image is not contiguous with an immediately preceding selected portion of the electronically stored image, and wherein a plurality of pixels within each separate portion of the electronically stored image are selected such that the plurality of pixels are adjacent to one another and together form a contiguous portion of the electronically stored image, and wherein each pixel in the plurality of pixels has the same at least one display parameter value.” Independent claims 1 and 14 also both recite a *second sequence*, “automatically displaying on a computer display device, according to a *second sequence*.” The first sequence is used by the automatic *selecting* step, while the second sequence is used by the automatic *displaying* step. The first sequence is different from the second sequence, as described in the Specification at least at paragraphs [0050] and [0051].

*Cohen* discloses only one sequence, the predetermined sequence of displaying the composite picture. “As the infant shakes the input wand 102 the computer 100 selects and displays, at predetermined locations, each object of a group of predetermined objects creating an audiovisual simulation on the display screen....The simulation ends when all of the objects have been placed at their appropriate locations on the screen thereby creating a predetermined

composite picture.” *Cohen*, at col. 4, lines 14-25.

Similarly, as discussed above, Blank also discloses only one sequence, the sequence defined by the user. Therefore, neither reference, alone or in combination, discloses automatically displaying on a computer display device, according to a *second sequence*, a representation of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.”

**B. Dependent claims 7 and 20 are patentable over *Cohen* in view of *Blank*.**

Dependent claims 7 and 20, then, must also be patentable, since “[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.” M.P.E.P. § 2143.03, *citing, In re Fine*, 837 F.3d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

**C. Conclusion: Claims 1, 7, 14, and 20 are patentable over *Cohen* in view of *Blank*.**

Claims 1, 7, 14 and 20 are patentable over *Cohen* in view of *Blank* because the combined references do not disclose all the elements of claims 1, 7, 14, and 20.

**IV. The application is in condition for allowance.**

The Applicant has addressed the Examiner’s rejections for all three independent claims, and respectfully submits that the application is in condition for allowance.

If for any reason this Response is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the

undersigned in Westborough, Massachusetts, (508) 898-1501.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Brian M. Dingman', with a stylized, cursive script.

Brian M. Dingman

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